REMARKS

Claims 1-20 have been examined. Applicant is canceling claim 10. Claims 1-9 and 11-20 are all the claims pending in the application.

Applicant thanks the examiner for acknowledging applicant's claim to foreign priority under 35 U.S.C. § 119(a) - (d) and further for acknowledging receipt of all certified copies of the priority documents.

In response to page 1, paragraph 1 of the Office action, applicant respectfully notes that the examiner did not indicate consideration of all the documents listed in Form PTO-1449 submitted with applicant's Information Disclosure Statement (IDS) filed on October 12, 2001. The attached Form PTO-1449 does not include the examiner's initials next to document Taiichiro Kurita, "Degradation of Quality of Moving Images Displayed on Hold Type Displays and Its Improving Method." Accordingly, applicant respectfully requests that the examiner consider this document and indicate such consideration to applicant in the next Office communication. Additionally, applicant respectfully requests that the examiner consider all the documents listed in Forms PTO-1449 submitted with applicant's IDSs filed on April 9, 2003 and June 5, 2003, and indicate such consideration to applicant in the next Office communication.

Applicant respectfully requests that the examiner contact the undersigned attorney to schedule an interview before the examiner considers applicant's response to the pending Office action.

Objection to Drawings

In response to page 1, paragraph 2 of the Office action, applicant is submitting formal

drawing corrections for Figures 1-7D that include "PRIOR ART" as a legend. Additionally, applicant is correcting the reference numeral 118 in Figure 9 to reference numeral 48.

Applicant respectfully requests that the objection to the drawings be withdrawn. Applicant respectfully requests that the examiner approve applicant's drawings and indicate such approval to applicant in the next Office communication.

Rejection of Claims 1-3, 8, 13 and 14 under 35 U.S.C. § 102(e)

The examiner has rejected claims 1-3, 8, 13 and 14 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,452,582 B1 (hereinafter Rolston). Applicant respectfully traverses this rejection.

Rolston addresses the problem of display aliasing and beating frequency artifacts between the display refresh rate frequency and the backlight frequency. (Background of the Invention). Roltson describes that to overcome these problems the display refresh frequency and backlight frequency are set such that the ratio between them includes a fraction (col. 3, lines 11-14; col. 4, lines 59-61) instead of a harmonic relationship which causes the color bands 54 as shown in Figure 5 (col. 4, lines 50-58). Accordingly, the display alias interference 54 stemming from the beat frequency is minimized. (Col. 5, lines 1-26).

There are at least two very significant differences between Rolston and the present invention. First, Rolston deals only with the frequency relationship between the display refresh rate and backlight signals and the resulting display aliasing. Rolston never discusses the relationship between the type of image being displayed (i.e., "static" or "dynamic") and the brightness of the back light.

Second, Rolston describes, in manipulating the frequency ratio between the display refresh and backlight signals, not to adjust the frequency of the back light, but to increase the display refresh frequency (see col. 2, lines 18-26; col. 2, lines 33-38; col. 4, lines 59-61). In contradistinction to Rolston, the present invention includes a back light that is set to a first or a second predetermined brightness depending upon the type of image signal displayed.

In the context of the language of claim 1, Rolston fails to disclose controlling the luminance of the back light based upon whether an image displayed on the display panel is a dynamic image or a static image.

Applicant notes that the examiner alleges that Rolston discloses "an inherent back light brighter at a first period than at a second period (see figure 4, column 2, lines 44-50), wherein the display panel displays a dynamic image at a second period, wherein the back light control circuit [sic] said light based on an image discriminating, and a controlling (42) said the display panel in response to the image (see figure 3)." Applicant submits that the examiner has misinterpreted and/or misapplied the teachings of Roltson.

With respect to Figure 4, Rolston describes "[t]raditionally, the display refresh frequency 46 is set at approximately 140 Hz. and the backlight frequency 48 is set at approximately 70 Hz., as illustrated in FIG. 4." (Col. 4, lines 42-44). Pixel degradation 50 is illustrated in FIG. 4. where the pixel is fully charged at the moment it is turned on and immediately begins to dissipate or relax over time." (Col. 4, lines 47-50). Rolston further describes that "a color band 54 appears as shown in FIG. 5 because the backlight is on at a time when the same pixels are being refreshed." (Col. 5, lines 50-52).

In view of the above, Figure 4 of Rolston fails to disclose, teach or suggest that the brightness of the backlight is set to a first or second predetermined level depending on the type of image displayed on the display panel. In fact, Figure 4 of Rolston illustrates the adverse effects resulting from the harmonic relationship (i.e., 2 to 1) between the display refresh frequency 46 (i.e., 140 Hz) and the backlight frequency 48 (i.e., 70 Hz). This aspect of Roltson is inapplicable to the above-mentioned limitation of claim 1.

With respect to col. 2, lines 44-50, Rolston describes that "a period of time is established during which the backlight may be turned on. This period is set long enough to provide a wide range of dimming. Dimming is accomplished when the backlight is on for a time less than the full period available. Dimming of backlights have improved to ratios greater than 500 to 1." Additionally, Figure 3 of Rolston illustrates a block diagram of Rolton's display, which includes a user interface 44 that receives a user input for adjusting the brightness of the backlight 22, where the input data is stored in RAM 38. (Col. 4, lines 33-38). Rolston also mentions that "the system 34 also stores a preset display refresh frequency and the backlight frequency in ROM 40." (Col. 4, lines 38-40).

There is nothing in the above passage of Rolston that discloses, teaches or suggests controlling the brightness of the back light to a first or second predetermined level depending on the type of image displayed.

Even if, assuming *arguendo,* Rolston suggests a variable brightness of the backlight 22, Rolston fails to disclose, teach or suggest, controlling the brightness of the backlight to a first or second predetermined brightness depending on whether the image displayed is a dynamic image or a static image. Additionally, the user's allegedly corresponding second brightness is not

"predetermined," and the user is not adjusting the level of the brightness of the backlight 22 based on whether the "display panel displays a dynamic image" or "a static image," as required in claim 1. Further, Rolston is silent to "the first predetermined brightness level is greater than the second predetermined brightness," as recited in claim 1.

The examiner's application of the doctrine of inherency is incorrect. "Inherent anticipation requires that the missing descriptive material is 'necessarily present,' not merely probably or possibly present, in the prior art." *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 U.S.P.Q.2d 1597, 1599 (Fed. Cir. 2002) (quoting *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 150-51 (Fed. Cir. 1999)). (See also MPEP §2112 (8th Edition)). Rolston fails to inherently teach the above-mentioned features of claim 1.

For the above reasons, it is submitted that Rolston fails to teach or suggest the invention defined in claim 1. Allowance of claim 1 and its dependent claim 2 is respectfully requested. Allowance of claim 3 and its dependent claims 8, 13 and 14 is also requested in that the distinguishing features of claim 1 are also found in claim 3.

Rejection of Claims 4-7, 9 and 10 under 35 U.S.C. § 103(a)

The Examiner has rejected claims 4-7, 9 and 10 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Rolston, in view of U.S. Patent No. 5,818,409 (hereinafter Furuhashi). Applicant respectfully traverses this rejection.

As a preliminary matter, applicant notes that the grounds of rejection fail to adequately address all the limitations of claims 4-7, 9 and 10. (See paragraph 6 of the Office action). MPEP §2142 (Legal Concept of Prima Facie Obviousness)(8th Edition - revised Feb. 2003) states that

the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. *Id.* In this case, the grounds of rejection set forth in paragraph 6 of the Office action fail to establish a *prima facie* case of obviousness with respect to claims 4-7, 9 and 10.

Notwithstanding, Furuhashi fails to cure the deficiencies of Rolston with respect to the control of the back light as recited in claim 3. The Furuhashi reference is inapplicable to this aspect of the present invention. Accordingly, Rolston and Furuhashi, individually or in combination, fail to disclose, teach or suggest the control of the backlight as recited in claim 3.

Dependent claims 4-7, and 9 are patentable at least by virtue of their dependency on claim 3, as well as reciting their own patentably distinct features. Claim 10 has been cancelled.

Rejection of Claims 11, 12 and 15-20 under 35 U.S.C. § 103(a)

The Examiner has rejected claims 11, 12 and 15-20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Rolston, in view of Furuhashi, and further in view of U.S. Patent No. 5,894,304 (hereinafter Hirano). Applicant respectfully traverses this rejection.

Hirano fails to cure the deficiencies of Rolston with respect to the control of the back light as recited in claim 3. The Hirano reference is inapplicable to this aspect of the present invention. Accordingly, Rolston, Furuhashi and Hirano, individually or in combination, fail to disclose, teach or suggest the control of the backlight as recited in claim 3.

Dependent claims 11 and 12 are patentable at least by virtue of their dependency on claim 3, as well as reciting their own patentably distinct features.

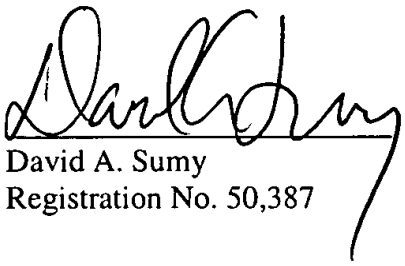
Notwithstanding, the allegedly corresponding detector pen 3 and comparator circuit 14 of Hirano is completely inapplicable to the limitations recited in claims 11 and 12. Further, the grounds of rejection do not address all the limitations recited therein.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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